

On September 1, 1995, the U.S. Environmental Protection Agency (EPA) issued a Maximum Achievable Control Technology (MACT) standard for hazardous air emissions from the aerospace manufacturing and rework industry. This rule is designed to reduce emissions of hazardous air pollutants (HAPs) including chromium, a suspected carcinogen, and volatile organic compounds (VOCs) by 123,000 tons annually. Hazardous air pollutants are substances known or suspected of causing cancer or other serious health effects. VOCs contribute to ground level ozone, or smog. Large volumes of methylene chloride, a pollutant strongly suspected of causing cancer, is commonly used to remove paint from the exterior of aerospace vehicles. The aerospace MACT standard will completely eliminate methylene chloride and other toxics from painting removal operations, while providing a variety of options for meeting this requirement.

### ***Does This Federal Standard Affect My Business?***

Every aerospace manufacturing and rework facility classified as a major source will be required to comply with this standard. A business is considered a major source if it has the potential to emit 10 tons/year of any single hazardous air pollutant or 25 tons/year of any combination of hazardous air pollutants.

### ***How Does My Business Comply With This Standard?***

The federal standard affects several types of aerospace industry operations. This includes cleaning, primers and topcoats, repainting, chemical milling maskant, and monitoring operations. Each of these is explained below. By substituting certain non-polluting processes or materials, some businesses may avoid being subjected to this MACT standard altogether.



### **1. Cleaning**

- ✈ Hand-wipe and flush cleaning operations will require the use of cleaning solvents with a vapor pressure of less than 45mm Hg at 20°C (68° F) or cleaning agents included in the list of approved solvents identified in this rule.
- ✈ Cleaning agents and solvent-laden rags must be stored in closed containers immediately after use.
- ✈ You must set up a handling and transfer system to reduce spills when handling cleaning agents.

### **2. Primers and Topcoats**

- ✈ VOC and HAP emissions will be limited to 2.9 pounds per gallon of primer excluding water, and 3.5 pounds per gallon of topcoat excluding water.
- ✈ You must use one of the following application techniques:
  - ✓ flow coat
  - ✓ dip coat
  - ✓ roll coat
  - ✓ electrostatic spray
  - ✓ brush coat
  - ✓ HVLP sprayguns



✈ Topcoats and primers containing inorganic HAPs such as chromium, cadmium, or selenium must be applied in a booth or hangar with an air flow that blows fumes into one or more exhaust vents that are then equipped with either dry particulate filters or a water wash system.

### **3. Depainting**

- ✈ Media blasting equipment, high intensity ultra-violet light blasting, or any other non-chemical depainting techniques or chemical strippers that do not contain HAPs are allowed.
- ✈ Depending on aircraft type, 26 to 50 gallons of stripper containing HAPs can be used for spot stripping or decal removal.

### **4. Chemical Milling Maskant**

- ✈ Protective coatings are limited to 1.3 pounds of HAPs or VOCs per gallon, excluding water.

### **5. Monitoring**

- ✈ Enclosed spray gun cleaners must be visually inspected at least once per month for leaks. All

leaks must be repaired within 15 days.

- ✈ Incinerators used to control primer, topcoat, and chemical milling maskant emissions must have their temperatures monitored using a continuous recorder.
- ✈ Depainting operations and coating applications with inorganic HAPs (chromium and cadmium) must continuously monitor the pressure drop across the filter.

### ***What are the Reporting and Record Keeping Requirements?***

If you are a major source affected by this standard, you were required to notify the Department of Natural Resources (DNR) by September 1, 1997. After this date, semiannual reports are required. The reports must describe all noncompliance and exceedence situations, as well as any changes to the processes you are using. These annual reports are used to show your compliance with this rule. All records for this rule should be maintained for five years.



### ***Contacts for More Information or Assistance.***

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.

For further information on the Aerospace MACT rule contact your DNR Regional or Service Center office shown on the **DNR Contact Fact Sheet** or the DNR's Central office at 608/266-2856.